

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

VLADIMIR GRUSHIN ET AL.

CASE NO.: PE0649 US-DIV7

APPLICATION NO.: UNKNOWN

CONFIRMATION NO.: UNKNOWN

GROUP ART UNIT: UNKNOWN

EXAMINER: UNKNOWN

FILED: CONCURRENTLY HEREWITH

FOR: ELECTROLUMINESCENT IRIDIUM COMPOUNDS WITH FLUORINATED PHENYL PYRIDINES, PHENYL PYRIMIDINES, AND PHENYL QUINOLINES AND DEVICES MADE WITH SUCH COMPOUNDS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information that may be helpful in the examination of the above-identified patent application. All of the information is listed on attached Forms PTO/SB/08A, PTO/SB/08B, and PTO-892.

Benefit of the earlier filing dates of U.S. Patent Application Nos. 10/366,295 filed February 13, 2003 and 09/879,014 filed June 12, 2001 are claimed under 35 U.S.C. 120 for the above-referenced application and information cited in the priority applications is not supplied with this Information Disclosure Statement.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,



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Dated: 11/24/2017

Enclosures

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheets

1

8

2

Complete if Known

Application Number	09/879,014
Filing Date	JUNE 12, 2001
First Named Inventor	VLADIMIR GRUSHIN ET AL.
Group Art Unit	2913
Examiner Name	KIELIN, ERIK J
Attorney Docket Number	PE0649 US NA

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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				Group Art Unit	2913
				Examiner Name	KIELIN, ERIK J
Sheet	2	of	2	Attorney Docket Number	PE0649 US NA

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		DJUROVICH, PETER I. ET AL., Ir(III) Cyclometalated Complexes As Efficient Phosphorescent Emitters in Polymer Blend and Organic LEDs, Polymer Preprints, 2000, 770-771, 41(1)	<input type="checkbox"/>
		CHATANI, NAOJI ET AL., Ru3(CO)12-Catalyzed Reaction of Pyridylbenzenes with Carbon Monoxide and Olefins. Carbonylation at a C-H Bond in the Benzene Ring, J. Org. Chem., 1997, 2604-2610, 62, American Chemical Society	<input type="checkbox"/>
		GOSMINI, CORINNE ET AL., Electrosynthesis of functionalized 2-arylpyridines from functionalized aryl and pyridine halides catalyzed by nickel bromide 2,2'-bipyridine complex, Tetrahedron Letters, 2000, 5039-5042, 41, Elsevier Science Ltd.	<input type="checkbox"/>
		CACCHI, SANDRO ET AL., The Palladium-Catalyzed Transfer Hydrogenation/Heterocyclization of B-(2-Aminophenyl-a,B-yrones. An Approach to 2-Aryl- and 2-Vinylquinolines, Synlett, 1999, 401-404, No. 4, Thieme Stuttgart, New York	<input type="checkbox"/>
		BALDO, M. A. ET AL., Very high-efficiency green organic light-emitting devices based on electrophosphorescence, Applied Physics Letters, July 5, 1999, 4-6, 75(1) American Institute of Physics	<input type="checkbox"/>
		BALDO, M. A. ET AL., High-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer, Nature, February 17, 2000, 750-753, 403, Macmillan Magazines Ltd.	<input type="checkbox"/>
		WANG, YUE ET AL., (Hydroxyphenyl)pyridine derivative, its metal complexes and application as electroluminescence material, Chemical Abstracts Service, March 1, 2000, Database No. 133:315395	<input type="checkbox"/>
		DEDEIAN K. ET AL., A New Synthetic Route to the Preparation of a Series of Strong Photoreducing Agents: fac-Tris-Ortho-Metalated Complexes of Iridium(III) with Substituted 2-Phenylpyridines, Inorg. Chem., 1991, 1685-1687, 30(8), American Chemical Society	<input type="checkbox"/>
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Sheet 1 of 1

Complete if Known

ation Number 09879,014

Date JUNE 12, 2001

named Inventor VLADIMIR GRUSHIN ET AL.

AR UNIT 2811

Other Name UNKNOWN

Case Number | FE0849 03

DOCUMENTOS

U.S. PATENT DOCUMENTS

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<p>Application Number</p>		<p>09/879,014</p>			
<p>Filing Date</p>		<p>JUNE 11, 2001</p>			
<p>First Named Inventor</p>		<p>VLADIMIR GRUSHIN ET AL.</p>			
<p>Group Art Unit</p>		<p>2811</p>			
<p>Examiner Name</p>		<p>UNKNOWN</p>			
Sheet	1	of	1	<p>Attorney Docket Number</p> <p>PE0649 US NA</p>	

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PTO/SB/08A (08-00)

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Sheet 1 of 2

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
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		BALDO, M.A. et al., High-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer, Nature, February 17, 2000, 750-753, Vol. 403			
		DJUROVICH, PETER I. et al., Ir(III) Cyclometalated Complexes as Efficient Phosphorescent Emitters in Polymer Blend and Organic LEDs, Polymer Reprints, 2000, 770-771, 41(1)			
		BALDO, M.A. et al., Very high-efficiency green organic light-emitting devices based on electrophorescence, Applied Physics Letters, July 5, 1999, 4-6, 75(1), American Institute of Physics			
		LOHSE, OLIVIER, et al., The Palladium Catalysed Suzuki Coupling of 2- and 4-Chloropyridines, Synlett, 1999, 45-48, No. 1, Thieme Stuttgart, New York			
		BALDO, M.A. et al., Highly efficient phosphorescent emission from organic electroluminescent devices, Nature, September 10, 1998, 151-154, Vol 395			
		DEDEIAN, K. et al, A New Synthetic Route to the Preparation of a Series of Strong Photoreducing Agents: fac Tris-Ortho-Metalated Complexes of Iridium (III) with Substituted 2-Phenylpyridines, Inorganic Chemistry, 1991, 1685-1687, 30(8)			

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Notice of References Cited	Application/Control No.	Applicant(s)/Patent Under Reexamination
	09/879,014	GRUSHIN ET AL.
	Examiner	Art Unit
	Erik Kielin	2813

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-3,718,488	02-1973	Trofimenko et al.	106/1.28
	B	US-2002/0064681 A1	09-2001	Takiguchi et al.	428/690
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
X	U	Thompson et al. "Ir(III) cyclometalated complexes as efficient phosphorescent emitters in polymer blend organic LEDs" Polymer Preprints 41(1), 2000, pp. 770-771.
X	V	Dedeian et al. "A new synthetic route to the preparation of a series of strong photoreducing agents: fac tris-othro-metallated complexes of iridium(III) with substituted 2-phenylpyridines" Inorganic Chemistry, Vol. 30, 1991, 1685-1687.
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